

**Abstract**

A method of making an air boost device, wherein a compressor wheel incorporated therein is re-designed to permit die inserts (20), which occupy the air passage and define the blades (4, 5) during a process of forming a wax pattern (21) of a compressor wheel, to be pulled without being impeded by the blades. This modified blade design enables the automated production of wax patterns (21) using simplified tooling. These wax patterns (21) can be used in a large-scale investment casting process, and produce an economical cast titanium compressor wheel which performs aerodynamically at high boost pressure/RPM.